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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/724,403

12/01/2003

Peter Ten Berge

081468-0307015

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12/11/2006

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EXAMINER

ANDUJAR, LEONARDO

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,403

Applicant(s)

BERGE ET AL.

Examiner

Leonardo Andújar

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 12-28 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-11 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, species 1 is acknowledged. The traversal is on the ground(s) that the subject matter of claims 1-29 is sufficiently related that a complete search for the subject matter of the elected claims would necessarily encompass a thorough and complete search for the subject matter of the non-elected claims. This is not found persuasive because referring to the restriction requirement set forth in the Office Action sent on 07/11/2006, it clearly stated the reasons why the different groups are patentable distinct. Additionally, the search is not coextensive as evidenced by the different fields of search for each of the groups. The fact that each of the groups are somehow related do not imply that their search are coextensive. Each of the groups includes specific limitations that made them independent and patentable distinct from each other. Note that a restriction is proper when the search is a non coextensive and/or it is burden for the examiner. Also, the traversal on the ground that there would not be an undue burden in examining the species in a single application was not found persuasive. Species 1 and 2 include mutually exclusive characteristics, which make them patentably distinct from each other. That is, the unpatentability of one of the species would not necessarily imply unpatentability of the other species. As noted in MPEP § 808.01(a), an election of species should be required prior to a search on the merits in all applications containing species and generic claims, and in all applications in which a generic claim recites such a multiplicity of species that an unduly extensive and burdensome search is required. On the other hand, such an election of

species should not be required if the species are considered clearly unpatentable (obvious) over each other or if there is an express admission by the applicants to that effect. In re Lee, 199 USPQ 108 (Comm'r Pat. 1978). The applicants have failed to submit or identify any evidence showing the species to be obvious variants or clearly admit on the record that this is the case. In addition to the above, each of the different species would require separately searching for each of their mutually exclusive characteristics. In other words, each of the species will require searching a separate subject of inventive effort. Thus the requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8-11 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Antaki et al. (US 6,686,214).

4. Regarding claim 8, Antaki teaches a method of preparing a substrate comprising: providing on a surface of the substrate a plurality of alignment markers, each of said plurality of alignment markers having a different orientation relative to a crystal axis of the substrate, wherein, for each of said plurality of alignment markers, a distance

between an apparent position of the marker and an actual position of an element of the marker is dependent on the orientation of the marker (abstract).

5. Regarding claim 9, Antaki teaches a distance between the orientations of each pair among the plurality of alignment markers is within the range of from (5×10^{-6}) degrees to 4 degrees (e.g. fig. 3).

6. Regarding claim 10, Antaki teaches that the orientation of at least one of the plurality of alignment markers is within the range of from 0.5 degrees to 2 degrees on one side of a nominal orientation of the crystal axis, and wherein the orientation of at least one of the plurality of alignment markers is within the range of from 0.5 degrees to 2 degrees on the other side of a nominal orientation of the crystal axis (e.g. fig. 3; col. 3/lls. 38-68 & col. 4/lls. 1-11).

7. Regarding claim 11, Antaki teaches that the step of providing said alignment markers comprises using an anisotropic etching process to etch said alignment markers into the substrate (abstract).

8. Regarding claim 29, Antaki teaches that alignment markers comprise a structure having a solid area, a clear area, and a striped area (e.g. fig. 1).

Allowed Claims

9. Claims 1-9 are allowed.

Conclusion

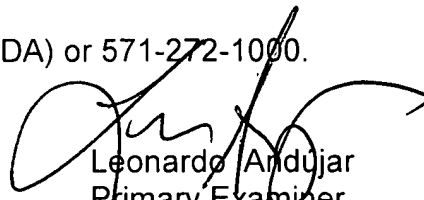
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonardo Andújar whose telephone number is 571-272-

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1912. The examiner can normally be reached on Mon through Thu from 9:00 AM to 7:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leonardo Andujar
Primary Examiner
Art Unit 2826

12/06/2006